

Patent Abstracts of Japan

PUBLICATION NUMBER : 08260988
PUBLICATION DATE : 08-10-96

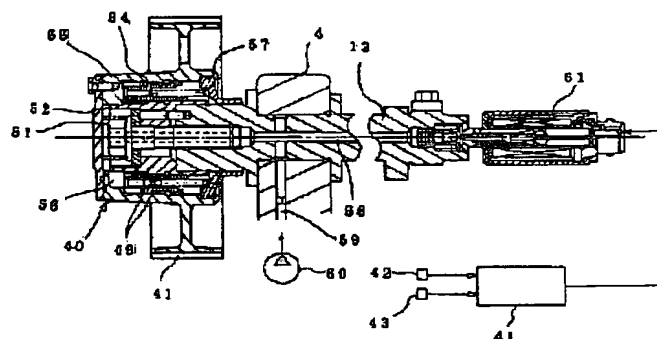
APPLICATION DATE : 23-03-95
APPLICATION NUMBER : 07064264

APPLICANT : NISSAN MOTOR CO LTD;

INVENTOR : OGAWA HIROSHI;

INT.CL. : F02B 29/08 F01L 1/00 F01L 1/26
F01L 1/34 F02D 13/02

TITLE : INTAKE SYSTEM OF ENGINE



ABSTRACT : PURPOSE: To heighten the actual compression ratio during low-speed operation so as to improve starting performance by providing a valve timing adjusting mechanism for adjusting the phase angle of a cam shaft and a control means for delaying the valve closing time of an intake valve at the time of high-speed operation more than the time of low-speed operation in a direct injection diesel engine.

CONSTITUTION: Each pair of intake and exhaust valves are disposed in such a manner as to surround a fuel injection valve facing to a combustion chamber, and intake and exhaust cams for driving the intake and exhaust valves to be opened and closed are formed on a cam shaft 13. One end part of the cam shaft 13 is provided with a valve timing adjusting mechanism for adjusting the rotary relative phase of the cam shaft 13 to a cam pulley 41 as a helical gear 54 moves in the axial direction to the oil pressure in an oil pressure chamber 56. The other end of the cam shaft 13 is provided with a solenoid valve 61 for controlling the opening and closing of an oil path 58 (shaft hole) extended to the oil pressure chamber 56 according to the engine operating condition, and when an electric current is applied to the solenoid valve 61, the intake and exhaust valves 9 are switched to the phase lag side valve timing.

COPYRIGHT: (C)1996,JPO

THIS PAGE BLANK (USPTO)